WHAT IS CLAIMED IS:

1. A solid-state camera device which comprises a plurality of light-receiving parts arranged at a constant interval on a substrate surface and a plurality of light-focusing parts disposed corresponding to each of the plurality of the light-receiving parts on the substrate surface so that the incident light is focused on the light-receiving parts, wherein the position of each of the light-focusing parts is shifted gradually larger toward the center of the camera region based on the position of each of the light-receiving parts corresponding to the light-focusing parts and the size along the substrate surface in the lateral direction of each of the light-focusing parts becomes gradually larger, as the location of the light-focusing part is getting closer to the peripheral camera region from the middle camera region on the substrate in the front of the exit pupil.

2. The solid-state camera device of claim 1, wherein the direction from the center of the camera region to the peripheral camera region corresponds to the lateral direction of the solid-state camera device.

3. The solid-state camera device of claim 1, wherein

the direction from the center of the camera region to the peripheral camera region corresponds to the longitudinal direction of the solid-state camera device.

4. A method of manufacturing the solid-state camera device according to ~~any one of claims 1 to 3,~~ Claim 1 which comprises at least a step of forming a film of a composition for the light-focusing parts on a semiconductor substrate on which the light-receiving parts have been formed and a step of patterning the film of the composition for the light-focusing parts by exposing it by using a specified mask and by developing, wherein the mask is composed of a transparent substrate on which closed region patterns are disposed, said closed region pattern having positions and sizes corresponding to those of the light-focusing parts.

5. A method of manufacturing a mask which comprises, forming a shading film on a transparent substrate and patterning the film with an electron beam exposure apparatus, wherein the first mask patterning data which define a plurality of first closed region patterns arranged on a flat surface at a constant interval and the second mask patterning data which define a plurality of closed region patterns arranged on the same surface at the same

interval as those for the first data so as to overlap with the corresponding first mask patterns are set at a minimum size unit, and the first closed region pattern is modified with a first modification scale and, at the same time, the second closed region pattern is modified with a second modification scale, based on the middle of an array of the above closed region patterns by an electron beam exposure apparatus and wherein patterns are formed in which the position of each of the overlapped regions between each of the first closed region patterns and the corresponding second closed region patterns is shifted gradually larger toward the middle of the array based on the corresponding position before the modification, and the size of the overlapped region becomes gradually larger, as the location of the overlapped region is getting closer to the peripheral region from the middle of the array.

6. The method of manufacturing a mask according to claim 5, wherein in a solid-state camera device having a plurality of light-receiving parts arranged in a constant interval on a substrate and a plurality of light-focusing parts disposed corresponding to each of the plurality of the light-receiving parts on the substrate surface so that the incident light is focused on the light-receiving parts, the first and the second scales are defined depending on

the drift of the light-focusing part based on the corresponding light-receiving part and the change in the size of the light-focusing part in the direction along the substrate surface, which are required when the position of each of the light-focusing parts is getting closer to the peripheral camera region from the middle of the camera region along the substrate surface.